

WHAT IS CLAIMED IS:

1. An electrode for a fuel cell comprising:

a gas diffusion layer; and

a catalyst layer formed over said gas diffusion layer;

wherein said catalyst layer comprises a first carbon particle, a catalytic metal supported on said first carbon particle, an ion exchange resin and a second carbon particle; and

a surface of said second carbon particle is water-repellent.

2. The electrode for a fuel cell as set forth in Claim 1, wherein an average value of lattice spacing of the [002] plane, d_{002} , of said second carbon particle is not less than 0.337nm but not greater than 0.348nm.

3. The electrode for a fuel cell as set forth in Claim 1, wherein a crystallite size in a direction of c-axis, $L_c(002)$, of said second carbon particle is not less than 3nm but not greater than 18nm.

4. The electrode for a fuel cell as set forth in Claim 2, wherein a crystallite size in a direction of c-axis, $L_c(002)$, of said second carbon particle is not less than 3nm but not greater than 18nm.

5. The electrode for a fuel cell as set forth in Claim 1, wherein said gas diffusion layer also includes said first carbon particle

and said second carbon particle.

6. The electrode for a fuel cell as set forth in Claim 2, wherein said gas diffusion layer also includes said first carbon particle and said second carbon particle.

7. The electrode for a fuel cell as set forth in Claim 3, wherein said gas diffusion layer also includes said first carbon particle and said second carbon particle.

8. The electrode for a fuel cell as set forth in Claim 4, wherein said gas diffusion layer also includes said first carbon particle and said second carbon particle.

9. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;

- an electrode for a fuel cell on oxygen supply side; and

- a solid polymer electrolyte membrane placed between said electrodes;

- wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 1.

10. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;

- an electrode for a fuel cell on oxygen supply side; and

- a solid polymer electrolyte membrane placed between said electrodes;

- wherein at least said electrode for a fuel cell on oxygen

supply side is said electrode for a fuel cell as set forth in Claim 2.

11. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 3.

12. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 4.

13. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 5.

14. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 6.

15. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 7.

16. A fuel cell comprising:

- an electrode for a fuel cell on fuel supply side;
- an electrode for a fuel cell on oxygen supply side; and
- a solid polymer electrolyte membrane placed between said electrodes;

wherein at least said electrode for a fuel cell on oxygen supply side is said electrode for a fuel cell as set forth in Claim 8.